

Plant Fact Sheet

COMMON BONESET

Eupatorium perfoliatum L.

Plant Symbol = EUPE3

Contributed by: USDA, NRCS, National Plant
Materials Center, Beltsville, MD

Robert H. Mohlenbrock @ USDA-NRCS PLANTS Database /
USDA SCS. 1989. *Midwest wetland flora: Field office illustrated*



guide to plant species. Midwest National Technical Center,
Lincoln.

Alternate Names

Common boneset,
Thoroughwort

Uses

Ethnobotanical: The leaves have been used to treat dengue fever. Modern German research suggests that Common Boneset may act as a general immune system stimulant. It has also been used as a diaphoretic and weak anti-inflammatory. **Caution:** Common Boneset is emetic and laxative in large doses, and it may contain pyrrolizidine alkaloids that are potentially harmful to the liver.

Landscaping and wildlife: The nectar from the flowers of Common Boneset is very attractive to a variety of pollinators, including bees, wasps, and butterflies. The Swamp Sparrow supplements its diet with Common Boneset seeds. Various caterpillars, such as *Phragmatobia lineata* (Lined Ruby Tiger Moth), *Papaipema cataphracta* (Burdock Borer

Moth), *Schinia trifascia* (Three-lined Flower Moth), *Chlorochlamys chloroleucaria* (blackberry looper), *Semiothisa continuata* (Geometrid Moth sp.) and *Haploa clymene* (Clymene Moth) eat various portions of the plant.

Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status (e.g. threatened or endangered species, state noxious status, and wetland indicator values).

Description and Adaptation

Common Boneset is a native perennial wildflower that grows from 2 - 4 feet tall. The central stem is covered in long white hairs and is unbranched with the exception of a few flowering side stems near the apex of the plant. The narrow, lanceolate (tapering), opposite leaves grow up to 8 inches long and 2 inches across. The bases of the leaves tend to grow together, making it appear as if the central stem perforates the leaves. Two- to eight-inch clusters of fragrant white flowers (with approximately 15 florets per flower head) appear in late summer or early fall. The florets produce wind-dispersed small dry seed with hair-like bristles. The fibrous root system frequently produces rhizomes (horizontal stem with shoots above and roots below), which create small colonies.

Distribution: Common Boneset prefers moist or wet conditions, soil with a significant amount of organic matter, and full to partial sun. It populates a variety of wetland habitats across eastern North America from Quebec south to Florida and west to Texas and Manitoba (USDA cold hardiness zones 2 - 10).

Establishment

Seed Propagation

Seeds ripen about a month after flowering and should be collected when the heads dry, split and the fluffy seed begins to float away. If collected earlier, dry the seed heads for 1 - 2 weeks in open paper bags. If seeds are sown directly, sow in the fall and sow thickly as germination rates are typically low. For container production, a cold-moist pretreatment at 40 degrees Fahrenheit for 3 weeks to 3 months will increase germination percentages. After pretreatment, sow seeds in a fine germination mix containing milled sphagnum moss. Transplant to potting mix after seeds have germinated. Seeds germinate at 70 - 85 degrees Fahrenheit and in the

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presence of light. Use a greenhouse with alternating temperatures (day temperatures 70 - 85 degrees Fahrenheit, night temperatures 65 - 68 degrees Fahrenheit). Seeds will last up to 3 years if stored in a cold (40 degrees Fahrenheit) and dry (30% relative humidity) environment.

Vegetative Propagation

Common Boneset can be propagated by division or two-node softwood tip cuttings taken in late spring. Divide the plants in the fall as they go dormant or in the spring just as shoots first appear.

Management

Common Boneset prefers moist to wet soil and full or partial sun. Livestock generally find the foliage of Common Boneset too bitter for grazing.

Pests and Potential Problems

The leaves of Common Boneset are favored by grasshoppers, flea beetles and saw flies, which can leave them looking bedraggled by midsummer. It is not drought-tolerant.

Environmental Concerns

No concerns at this time.

Cultivars, Improved, and Selected Materials (and area of origin)

There are no recommended cultivars or selected materials at this time.

References:

Brown, M., and R. Brown. 1984. *Herbaceous Plants of Maryland*. Port City Press, Inc., Baltimore.

Cathey, H. M. 1990. USDA Plant Hardiness Zone Map (USDA Miscellaneous Publication No. 1475). From The United States National Arboretum (<http://www.usna.usda.gov/Hardzone/ushmap.html>) [online: cited 2 November 2008]. United States National Arboretum, Washington, D. C.

Cullina, W. 2000. *The New England Wild Flower Society guide to growing and propagating wildflowers of the United States and Canada*. Houghton Mifflin Co., New York, New York.

Hilty, J. 2002-2008. Common Boneset. From Illinois Wildflowers (http://www.illinoiswildflowers.info/prairie/plants/cm_boneset.htm) [online: cited 20 October 2008]. John Hilty.

Foster, S. and J. A. Duke. 2000. *A Field Guide to Medicinal Plants and Herbs of Eastern and Central*

North America, 2nd ed. The Peterson Field Guide Series. Houghton Mifflin Company, New York.

Perry, L. 2008. Eupatorium. In Perry's Perennial Pages, The University of Vermont Department of Plant and Soil Science (<http://pss.uvm.edu/pss123/wmeupat.html>) [online: cited 4 October 2008]. Dr. Leonard Perry, Professor, University of Vermont.

Kujawski, J.; Davis, K. M. 2001. Propagation protocol for production of container *Eupatorium perfoliatum* seeds; USDA NRCS—Beltsville National Plant Materials Center, Beltsville, Maryland. In Native Plant Network (<http://www.nativeplantnetwork.org>) [online: cited 20 October 2008]. Moscow (ID): University of Idaho, College of Natural Resources, Forest Research Nursery.

TWC Staff. 2007. *Eupatorium perfoliatum* (Common boneset). In Native Plant Database of Lady Bird Johnson Wildflower Center at the University of Texas at Austin (http://www.wildflower.org/plants/result.php?id_plant=EUPE3) [online: cited 20 October 2008]. Lady Bird Johnson Wildflower Center, Austin, Texas.

USDA, NCRS. 2008. PLANTS Profile for *Eupatorium perfoliatum* (Common Boneset). In The PLANTS Database (<http://plants.usda.gov/java/profile?symbol=EUPE3>) [online: cited 20 October 2008]. National Plant Data Center, Baton Rouge, Louisiana.

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